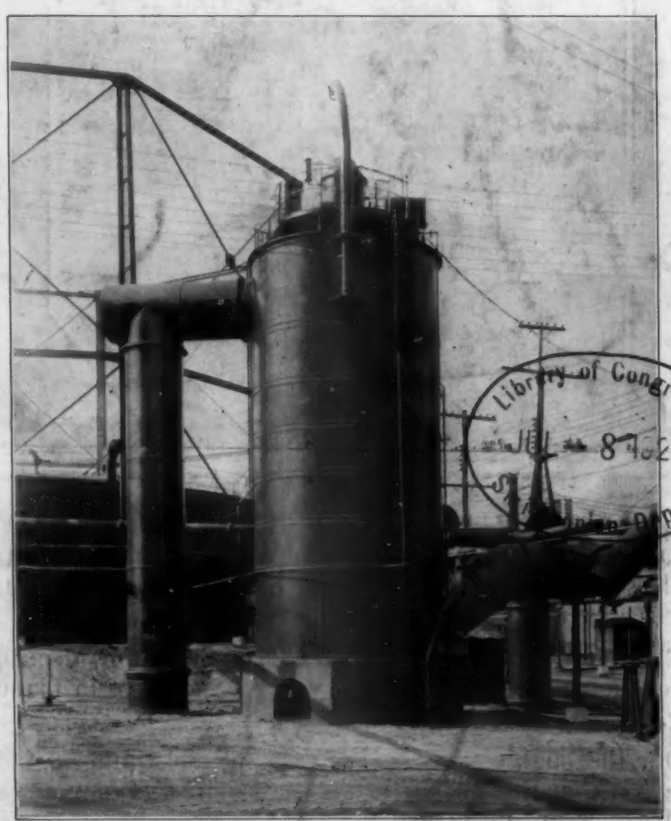
AMERICAN
GAS JOURNAL
Established 1859 Pioneer of the Gas Industry

VOL. 125. NO. 1.
WHOLE NO. 3585.

NEW YORK, SATURDAY, JULY 3, 1926.

Subscription, $5 Per Year
$6 Canada $8 Foreign

B. H. CO. VERTICAL SCRUBBER
FELD TYPE

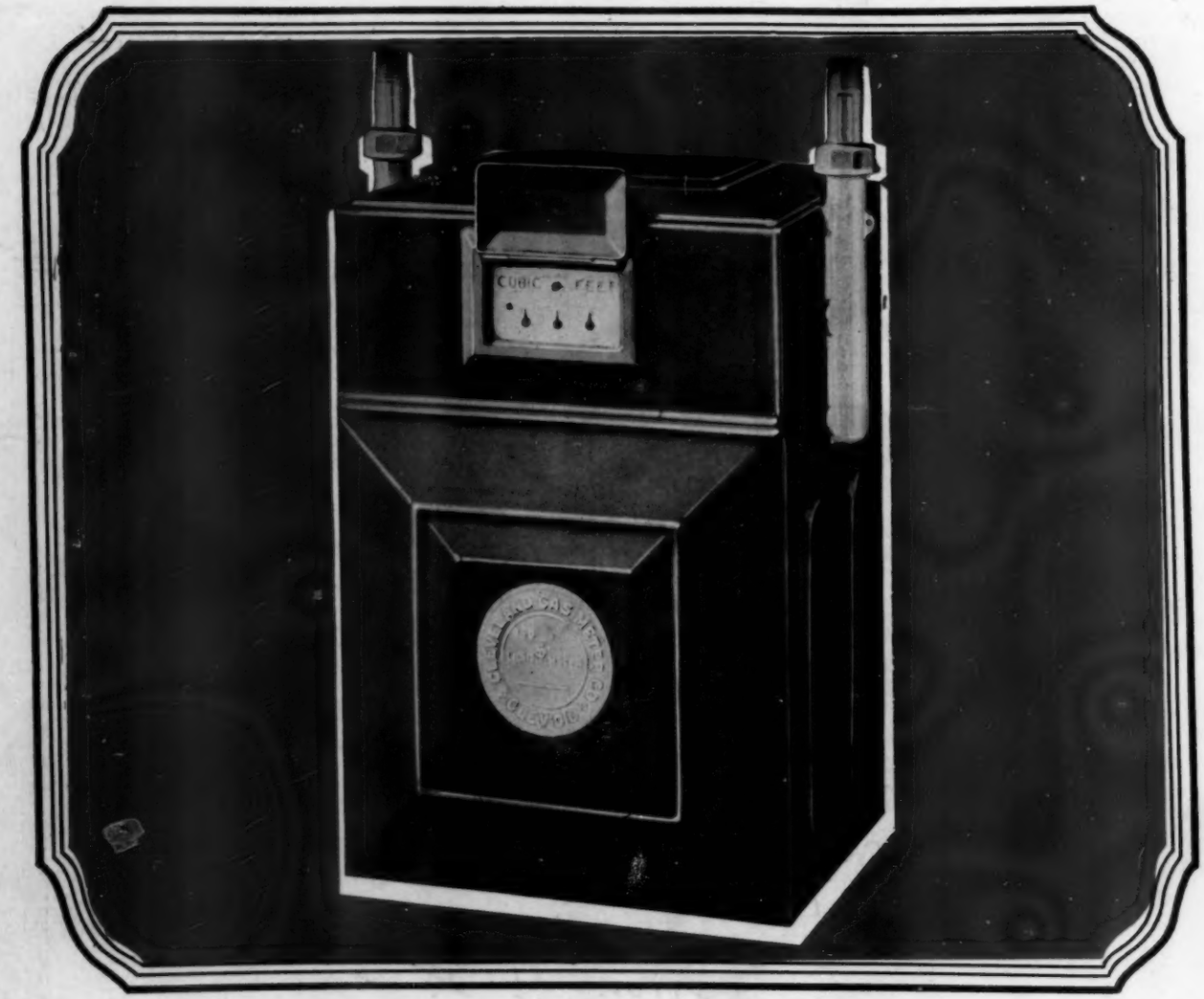


Library of Congress
JUL 8 1926
Copyright Deposit

For the Extraction of Naphthalene, Ammonia, Etc.

The BARTLETT HAYWARD CO.
Engineers and Founders
BALTIMORE NEW YORK

Index to Contents, Page 4 Advertising Index, Page 28



Dependability in a gas meter means a constant measure of reliable service; this is appreciated by the Superintendent, the Meter-reader and the Consumer.

Cleveland Gas Meters have a reputation for dependable service, the result of over thirty years' experience in manufacturing.

Our thoroughly organized and completely equipped factory assure you that the workmanship, materials, accuracy and general efficiency are unequaled.

"A" and "B" Types Meter Repairing

CLEVELAND GAS METER COMPANY

2180 East 65th Street **Cleveland, Ohio**

GLOVER-WEST
Vertical Retorts

1911
FITCHBURG
MASS.

1925
AFTER 14 YRS.

Continuous Satisfactory Service

WEST GAS IMPROVEMENT CO.
of America, Inc.
441 Lexington Ave. New York.

American Gas Journal

SIXTY-SEVENTH YEAR

Published Weekly by American Gas Light Journal, Inc., 53 Park Place, New York, N. Y.

S. G. KRAKE, Pres. & Treas. C. S. MYERS, Vice-Pres. A. M. GLEASON, Sec'y.

STANTON G. KRAKE, Managing Editor ISMAR GINSBERG, Editor

"MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS"

Contents of This Issue

The Gas Man at the Convention—M. S. Sloan 1
Gassin' Up the Sesqui—R. B. Duncan 4
A Three- or Five-Year Gas Program 7
You Can Do It Better With Gas—Edna Haas 10
As the Journal Views It 12
The Gas Sales Conferences
The Architectual Contest
Industrial Gas Lesson No. 126 13
You Start and I'll Follow—J. B. Dillon 14
Ideas for the Man Who Sells—William H. Matlack 15
News of the Gas Industry 16

Subscription $3.00 per year, including postage, in the United States, Mexico, Cuba, Porto Rico, Hawaii or the Philippines; in Canada, $4.00; foreign, $5.00—Single Copies, 10 cents.

AMERICAN GAS JOURNAL. July 3, 1926. Vol. 125. No. 1.
Published weekly by American Gas Light Journal, Inc., New York, N. Y.
Entered as second-class matter Jan. 9, 1917, at the post-office at New York, N. Y., under the Act of March 3, 1879.

AMERICAN
GAS JOURNAL

Established 1859—Pioneer of the Gas Industry

Vol. 125. No. 1. NEW YORK, JULY 3, 1926. Whole No. 3583.

The Gas Man at the Convention*

Executives expect him to gain from social and business contact

M. S. Sloan

President, Brooklyn Edison Company, Brooklyn, N. Y.

AS I have attended state and sectional and national utility conventions in the last few years it has been very impressive to me to notice how they have been growing in size and interest. This has been the case with the meetings of our own Empire State Association. It is true of other state associations; and those of us who have gone to the national conventions know that they have attained a size which governs the choice of cities in which they may be held and provide programmes of such importance and variety that no person can take in all the meetings in which he has an interest.

This rapid growth is evidence of the fact—which I have never heard any executive undertake to dispute—that conventions are valuable to our industry and its personnel. There is a question, however, in the minds of a good many whether full value is always obtained from conventions; and it was this question which dictated the choice of the subject on which I am to speak—"What the Executive Would Like to Have Those Attending a Convention Get Out of It."

Every company which sends people to a convention makes an investment in so doing—an investment of employes' time and of money expended. Sometimes this investment runs up to quite a sum; and it is only reasonable that there should be a return on it. In fact, there must be a return, else the convention has failed of its purpose or the delegates failed in theirs.

* Presented at the meeting of the Commercial Section of the Empire Gas and Electric Association.

Human and Business Sides

A convention has two sides—a social or human side; and a business or educational side. They are both important, and there is value to be obtained from both. I suppose there is no business in the world where there is a fuller and freer interchange of information among companies than in our utility business, which is one reason why it grows and its practices improve all the time. This interchange is by no means confined to the reports and papers and speeches at conventions and meetings. Frequently very helpful ideas are obtained in the chance intercourse of luncheon or dinner, the conversation of men sitting side by side in the convention, the rambling talk during the golf game. "How do you handle thus and so in your company?" "Well, we do it this way"—and so on. You know how it goes. We've all done it, and got help from it—suggestions, ideas, information.

If any man has a problem in his work—some point on which he requires information, or the results of experience outside his own experience, I know no likelier way for him to get help than contact with men doing work similar to his own in other companies such as he can get at conventions.

The human contact with fellow-workers which conventions provide is helpful and stimulating. Acquaintances are made, friendships are ripened, which lead to a closer bond of interest in the personnel of the industry and in the industry itself. Personally, I am always glad when a member of our organization tells me he has had a good time at the convention. If he has enjoyed the human

side of it he has inevitably done something for himself and for the company.

What a Convention Really Is

But this human and social side is by no means all there is to a convention. Moreover, that side of the convention may be over-emphasized until the convention comes to be regarded merely as an excursion or a junket. A convention is not that. It is not a vacation, or time off awarded to members of the organization as recognition of good work they have done for the company. It is an opportunity to learn, to get information, to get ideas, and to furnish information and give ideas. Before any convention is held, a lot of work and thought is given by a good many people to the organizing of it. A programme is arranged to present reports and papers and opportunity for discussion of them; and this programme represents the focussing of much value into a short space of time. No report, no paper, gets a place on that programme which is not regarded as important and essential by someone. It follows that the executive expects his company people to attend the business meetings of the convention, to pay attention to what transpires there, and to absorb all there is there which is pertinent to his work. Some companies have a plan under which delegates to conventions are required to write digests or summaries of the convention discussions of matters in their field, for presentation and subsequent discussion in the company departments with those who were not fortunate enough to attend the convention, and this has obvious merits.

Giving Information

I have spoken of getting information. It is just as necessary to be in position to give information and to contribute to discussions whatever one's own experience has produced which is in point. This contributes to the value and interest of the convention, and it develops the capabilities of the individual. A convention, in other words, offers opportunities of growth by absorption and by exercise of one's own faculties; and the executive would like his company people in attendance to get the value of both processes.

A convention is a meeting-place of many people, many minds, many personalities. It presents a diversity of experience, of knowledge and of point of view. It is not fraternization and good-fellowship alone, though it offers all the value of those very important items in life. It is not solely a schoolroom or a lecture-course, though it has elements of value akin to those methods of instruction. It has, or it should have, in it a quality of stimulation and inspiration—of quickening of interest; and if it does not carry that the convention is at fault or the delegates are at fault. My experience leads me to believe that where there does not result from attendance at a convention this stimulation and quickening of interest, it is the individual who is at fault, not the convention.

What Can Be Obtained

What the executive would like to have those attending a convention get out of it, then, may be summarized under three heads:

First, a human thing, which is acquaintances with the personnel of the industry and a strengthening of the contacts and friendships which should exist among workers in a common cause.

Second, a professional thing, which is an increase of knowledge applicable to one's daily work, so that work and the individual doing it may become more efficient.

Third, a spiritual thing, which is a stirring up and quickening of interest in the job and the industry and a renewal of the forces within one's self for future effort.

Such possibilities every convention of our association, every convention of our industry offers to those who attend it. I don't think I need to elaborate on them, or to endeavor to point out the individual's interest in them. They mean growth and development and achievement and advancement; and every executive would like to see those attending a convention get growth and development out of it for themselves quite as much as for the company. Our industry—any business or industry, for that matter—can grow and advance only as the individuals who are that industry grow and advance; and our industry least of all can afford to stand still. It needs the friendships and human ties, it needs the co-operation and unified aims, it needs the interchange of information and experience and the maturing of judgments, it needs the vigor and stimulation and inspiration of its personnel which can and do come out of conventions, and which constitute the value and the justification of conventions. It needs these elements because our industry stands in a closer relationship, through business and the home, than any other industry does with the great body of the public. It comes nearer to the people; it affects them more vitally in their lives, and for that reason it must always be progressive and progressing and we who compose the industry must always be up and doing.

Spiritual End, Very Important

For that reason this third element I have spoken of, which I have termed a spiritual thing, is of very great importance. It might properly be termed the spirit of service, and in that sense it includes the other elements of value in conventions—it is, in fact, all embracing. A convention, when all is said and done, is simply an agency by the use of which we may learn in various ways how to make our business and how to make ourselves more useful and serviceable to the public. If we don't get that out of our attendance at conventions—if we don't get that in practical ways and in the spirit, the convention hasn't been much good to us.

Service is one of the hardest-worked words in the English language, and in our industry it gets

especially hard use. We don't sell articles or commodities, as most businesses do. We sell a service—gas and electricity manufactured and delivered for use in the homes and business places of our customers. But our companies are more than sellers of service—they are institutions of service, public servants to all and sundry in the community. There is a considerable distinction there, I think. The merchant, the manufacturer, the banker, the professional man, are all valuable elements in the community. If they perform their work honestly and well, they deserve well of the community. But they do not stand in the same relationship to it that our utility companies do. They are necessary, but not essential, every minute of every day of every year. Our companies are.

Furnishing Good Service, First Duty

Furnishing good service, technically speaking, is our first duty to the public; but having the spirit of service underlies that. It is the basic and essential thing in our relations to the public—the thing necessary for every person in the organization, from the newest employe right up the line to the chief executive. It is necessary for us to have it and to express it in deeds; and it is necessary for the public to know that we have it. Through our having it and expressing it in deeds which will prove to the public that we have it will come the progress of our industry in the future, and all the accomplishment, both of individuals and of our industry itself, which we hope for and plan for and work hard for.

It is tremendously inspiring to me to ponder how the relations between business and the public have improved through the centuries, progressing always to a higher ethical level. The old Romans had a proverb—"Caveat emptor," "Let the buyer beware," which expressed the business ethics of that day and age. And for a good many years after the Roman empire had disintegrated that was the law of business. It persisted, in fact, until a time which some of this generation can remember. Let the other fellow look out for himself. Stick him or he'll stick you. It wasn't a fair way of dealing; it wasn't an honest way. It has given place, I am glad to say, to a fairer and more honest and better basis. Today any reputable concern holds itself responsible for the quality of its goods and the character of its representation of them. It says to the public, in effect, "You are safe in dealing with us; and if you think our transaction with you hasn't been on the level, we'll endeavor to work out an adjustment which shall be fair to both parties."

Much Thought Given to Public Service

As public utilities which are public servants, our companies go much further than that, and it is right that they should. I don't want to imply that our standards of ethics and our conception of our relationship to the public are higher than those of other businesses and business organizations, but I do believe that we give a good deal more thought to these matters, and more time and effort to working them out as part of our business policy than many businesses do. If we hadn't done so, we shouldn't have been able to reach our present stage of advancement; and if we shouldn't continue to do so we'd inevitably find our progress stopped and our development as companies and as an industry strangled.

Our progress, in other words, depends on the maintenance of friendly and harmonious relations with the public and the steady improvement of those relations in all ways possible. This, in turn, depends on the possession and expression of the spirit of service of which I have been speaking—on the most complete and unquestionable fulfillment of our duty as public servants.

A convention of our industry—this convention or any other—ought to operate to quicken and invigorate this spirit of service so that those attending it would go back to their various jobs able to do them better and put more of that spirit into them. Those who get the most of this element out of a convention are those, in my judgment, who get the greatest value there is in going to conventions.

Enough Gas in Reserve to Cook Your Meals for 14 Years!
If we stopped making gas today, there'd be enough in one of our holders to operate all the burners in your gas range continuously for 14 years! (See note.)
Think what it costs to store great gas reserves like this! Holders such as ours cost on an average of $000,000 each to erect, and they cover a lot of ground which has to be bought and paid for like any real estate.
"If it's done with Heat—you can do it Better with GAS"
It takes nearly 150 gallons of paint to protect the outer surface of each holder, and this paint must be renewed regularly.
We have on our payroll men who spend all their time in connection with storing the gas and maintaining the holders.
All of this expense, of course, is solely for your protection. There must always be gas in the pipes waiting for your needs no matter what the emergency demand or the cost of keeping this supply ready.
(Your Name and Address Here)
A.G.A.-571
(Note: Revise figures to fit your local conditions).

One Phase of What Is Meant by Giving the Public Good Service

Gassin' Up the Sesqui *

How and where gas is being used in the Philadelphia Exposition

R. B. Duncan

Superintendent, City District, Philadelphia Gas Works

SUPPLYING gas to the Sesqui-Centennial International Exposition has been the most interesting, most aggravating and most complicated work I have ever had the privilege of supervising.

It has been made interesting due to the many complications arising. The site of the Sesqui-Centennial, the southern end of Philadelphia, was formerly low, marshy ground, many places in the area being used for dumps. Laying gas mains in this filled-in ground, the fill in many places being at least twenty feet deep of the bed spring, barrel and old concrete variety, brought forth many problems. One never knew what the next foot of excavation would unearth. All of the buildings of any size have been erected on piling.

The original layout of the Exposition was very definite in its design, the amount of gas required for each building being shown on the prints as made up by the Director of the Sesqui-Centennial. Our gas main system was designated to meet these requirements and work started on the installation of same. The work had barely started before changes were made and it has been a daily occurrence ever since.

Laying Mains and Services at the Sesqui-Centennial—Upper Left, Edward Singley, General Foreman, P. G. W. City District, Studying the Layout; Upper Right, Unloading Service Pipe; Lower Left, Sam Burns, Main and Service Foreman; Albert Heron and John Dreuding Servicing a Concession; Lower Right, Foreman Burns Repairing First and We Hope the Only Leak

The Low Pressure System Used

The Director of Works of the Sesqui-Centennial and his assistant are Western men, familiar only with high pressure gas, and it was hard to convince them when they were overloading a low pressure system. This made necessary in several places, the running of parallel mains, where, if the true consumption of gas had been known at first, one main of proper size would have sufficed.

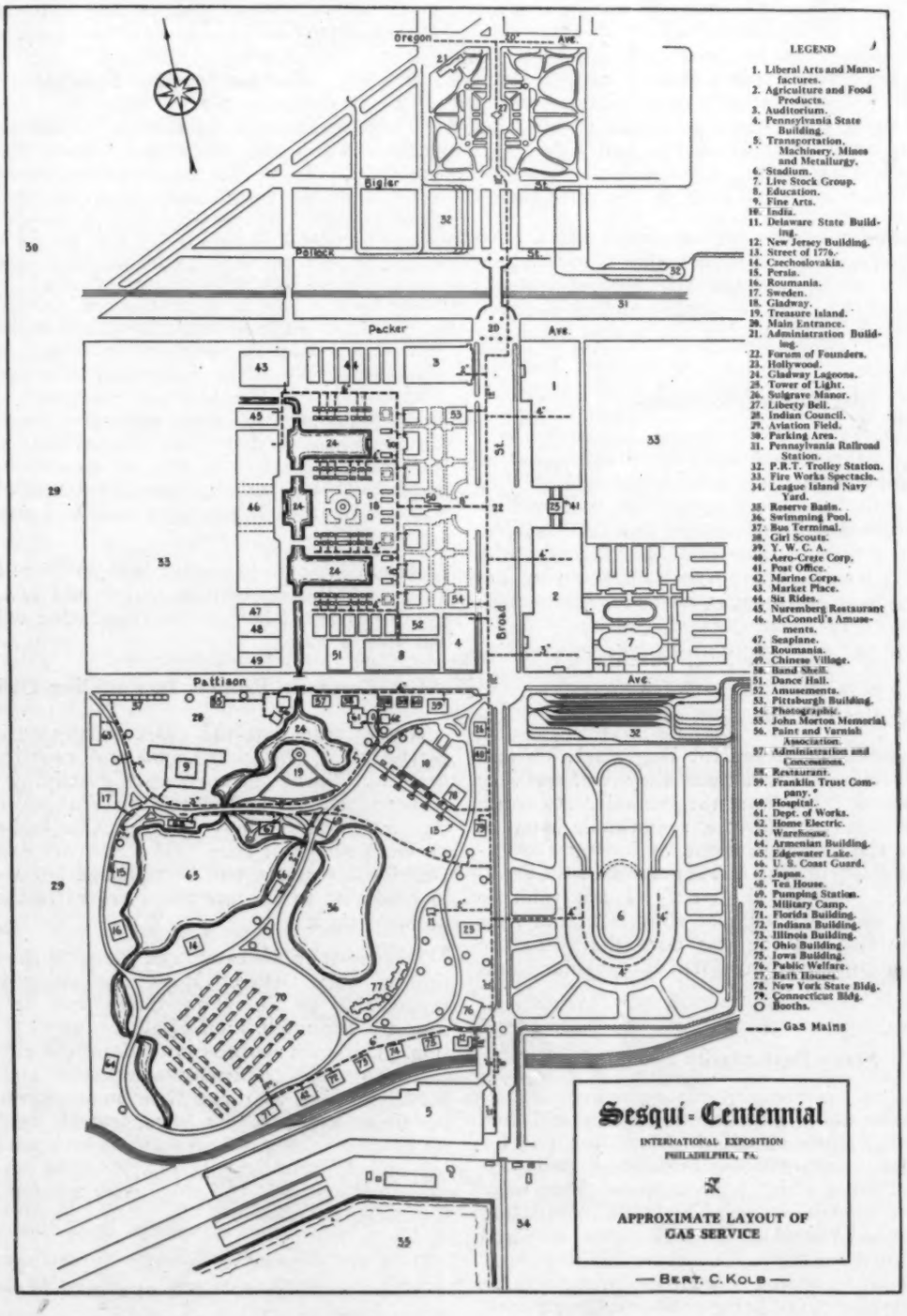
The accompanying sketch shows approximately the conditions as they existed at the time of writing this article—May 30th.

Our main supply to the ground required the running of about 7,200 feet of 12-inch cast iron main, from Oregon Avenue to the Navy Yard, connecting into a 20-inch main on Oregon Avenue. As good soil was found on Broad Street, cast iron pipe with cement joints was used, except where two bridges were crossed, steel pipe being used on these, one a 12-inch steel and the other an 8-inch steel manifold. The ditch for the 12-inch main was dug with a small trenching machine and considerable time and money were saved by its use. The condition of the fill prevented us from using a trenching machine on any of the branch lines, all excavations being done by hand.

Excavating Work

A mutual agreement between the Bell Telephone Company and ourselves was made shortly after starting the excavation for our steel branch lines, in which the Bell Company agreed to fill in the ditch, if permitted to lay a 4-inch duct in our ditch to one side of our main. This agreement saved both companies considerable money. The service

* From "U G. I. Circle."



connections to the branch lines have been made with saddles, except where outlets have been left.

To date we have run the following amount of pipe in sizes shown below—I will not attempt to predict what the final figures will be:

12"	cast iron pipe	7,240 ft.
8"	steel screw pipe	2,194 "
6"	" " "	4,220 "
4"	" " "	5,343 "
3"	" " "	3,137 "
2"	" " "	4,200 "
1¼"	" " "	5,600 "
	Total	31,934 ft.

Our company did not take any orders for the connection of appliances at the Exposition, due to the

fact that many differences arose between union and non-union men of all trades, which at times seriously handicapped the progress of the work. The above decision brought most of the plumbers doing work at the Sesqui to our office for information and help. We assisted them wherever possible and relieved them of many headaches and I feel sure that our liberal attitude of helpfulness has been appreciated and will bear fruit in the near future.

For example, the gas pipe plans for buildings No. 1 and No. 2 specified a ¾-inch outlet to each of the 400 booths in each building. Our office practically designed the entire piping system in each case, directing the plumbers in the proper size of pipe to be run.

An All-Gas Exposition

I can say without doubt of contradiction that all the cooking, house heating and water heating in the Exposition will be done by gas. In the Stadium alone we have run a 4-inch supply line for 1,500 feet around the southern end of same, leaving an outlet every twenty feet for the purpose of supplying gas to many appliances, among which so far recorded are:

37 "Hot Dog" sandwich machines.
8 gas ranges.
16 water heaters.

I have never seen these Hot Dog sandwich machines but from all predictions they will be very much in evidence throughout the grounds. A certain Philadelphia packer paid the remarkable sum of $300,000 for the privilege alone of having the exclusive right to supply the inside portion of the sandwich, namely the "Frankfurter." I am told, to operate this machine, one just shovels in the rolls and frankfurters and the gas does the rest; the insertion of a dime bringing forth the popular sandwich, mustard and all.

Many Restaurants Provided

There will be many restaurants, lunch stands and cafes on the grounds, all of which will use gas for cooking. Many instantaneous heaters are being installed, and I must admit I never knew there were so many uses for hot water. The latest installation of a water heater, for which we set a meter, divulged the secret of making the best concrete building block in the world (at least this is what the manufacturer claims). The blocks are being made on the grounds and a house constructed of same. Hot water is used in the manufacture.

There are so many different exhibitors using gas and demonstrating its use in their articles of manufacture that to attempt to describe same would be an endless task. One is almost led to believe that without gas the Sesqui-Centennial would be a complete failure. When visiting the Exposition, check me up and see if I am correct in my deductions.

Gas for Heating Buildings

There are many exhibitors who have predicted an early Fall and have made provision for heating their buildings. This is being done exclusively by gas, some radiator installations, but mostly with gas-fired boilers. At present time inquiries are being made by representatives of the Sesqui, as to the possibility of our company supplying 13,000 feet of gas per hour, to heat the main auditorium building.

We are making meter installations in all buildings where gas is to be consumed, although the Sesqui-Centennial Exposition Association has agreed to be responsible for the total consumption. It is my understanding that the association intends billing the concessionaires for the proportional part of the gas bill, although I do not see exactly how it will work out in a building like No. 1 and No. 2 with 400 booths in each and but two 150-A meters registering the gas consumed.

Remarkable progress has been made in the preparation for the Exposition, and with a few weeks of good weather, I believe the celebration will blossom out like a rose.

Gas Company Prompt In Fulfilling Obligations

Kindly note that the gas company entirely completed all of its obligations and requirements by May 29. This is in itself very gratifying and more so when told by the Director of Works of the Sesqui that ours was the only company that had completed its work ahead of time. Of course we expect many additional services will be required but we shall be in readiness to execute these orders in the shortest possible time.

Too much credit cannot be given to the organization of City District in accomplishing the above remarkable result. Four-thirty was the quitting time for the union men of all trades on the Exposition. Our men worked until darkness alone caused them to stop. Saturday afternoons and Sundays meant nothing to them, their main objective being the finish. It is only a loyal, honest, hard-working set of men who could accomplish such an undertaking and I most heartily congratulate each one of them and end my little story with a poem by Edgar A. Guest, as follows—

There were thousands who told us it could not be done,
There were thousands who prophesied failure,
There were thousands to point out to us one by one
The dangers that waited to assail us.
But our men just buckled in with a bit of a grin
And took off their coats and went to it.
And started to sing, as they tackled the thing
That "could not be done"—and they did it.

A Three- or Five-Year Gas Program

Report of committee on association activities

YOUR committee was appointed by the president under authority of the executive board at its meeting in New York on November 18, 1925, for the purpose of preparing a program covering the activities of the association for a three-to-five-year period and to report thereon at this conference.

While all projects undertaken by the association have been duly authorized by the executive board, it is well that we should from time to time stop and take stock of our activities for the purpose of determining if the association is carrying out its purpose in conformity with the constitution.

Objects of Association

The objects of the association as so well set forth in Article 2 of the constitution are as follows:

Section 1. To promote and develop the gas industry and to co-ordinate its activities to the end that it may serve to the fullest possible extent the best interest of the public.

Section 2. To increase the effectiveness of gas service for light, heat and power for the mutual benefit of the producers and the users.

Section 3. To advance to the highest efficiency the methods of manufacture, distribution, utilization, sales and accounting employed in the gas industry and to collect, co-ordinate and disseminate ideas and information for this purpose.

Section 4. To conserve and encourage investment in the gas industry.

Section 5. To promote closer relations and cordial co-operation in all branches of the gas industry.

Section 6. To advance knowledge and learning in the sciences, and to stimulate invention and research, especially as applied to the gas industry.

Section 7. To co-operate with other organizations in efforts toward economic advancement, accident prevention, conservation, standardization and other activities.

Section 8. To provide methods of education for employees in the gas industry and generally to increase individual efficiency.

Survey of Activities Made

A careful survey of the association's present activities, as set forth in the budget and in studies that have been made therefrom, makes it plain that all of them are in strict conformity with the purpose of this organization. Whether they all bear the proper relation to each other is a matter for individual opinion. It must be borne in mind at all times that probably no two individual members of the association will be able entirely to agree upon the actual relative importance of all of our undertakings, and our action must depend upon the best thought of the industry with all elements duly represented.

In the annual address of the president to the convention in Atlantic City in October, 1925, Mr. Abell said, speaking of the association:

"It is self-evident that it can never complete its work and absolutely meet and finish all its obligations, because the industry must be continuously developing and expanding and must meet its opportunities and its responsibilities. It is, however, felt that the association is well on its way, even though it cannot at any time reach all ultimate objectives. * * * Certainly there is no organization in existence showing and demonstrating a better spirit of co-operation and mutual help than that manifested in the American Gas Association. A continuation of this manifestation is no longer a conjecture. The gas industry is assured of the most complete co-operation of every branch of its business; therefore its rapid advancement is here and must be met."

A Future Plan Difficult to Formulate

Manifestly, the committee cannot set forth in extended detail a plan to be followed through the years to come. Conditions change as time passes, and there must be readjustments as new problems or new aspects of our business come to view.

When the association was formed we were in the grasp of economic conditions for which we were not responsible and over which we had little control. Mounting costs of material and labor as a result of the World War, with inability to secure advances in rates rapidly enough or large enough to take care of the costs of production and distribution put us in a serious condition. Our securities were correspondingly depressed in price. Adequate valuations were practically unknown as to public utilities. Public opinion was less favorable to the public services than is the case today.

Conditions Have Changed

These conditions have indeed changed. Our securities now command respect and confidence in the financial markets; our rates and our regulation are more fair and satisfactory; our courts and commissions have recognized that the public interest requires such rates as will afford adequate credit to finance extensions and improvements; our public relations have vastly improved; the demagogue gets less attention now from the American people.

For the present satisfactory situation the association is to a large extent responsible. No industry or any sort of business can succeed without adequate organization. The association is a necessary factor in our life.

What does the present situation of the industry call for in the way of further intensive study, research and progressive development?

We must improve along all lines our relations with the people whom we serve, and we must see to it that the present and future generations are instructed in sound economic principles. We have the new problems which must be faced and they even transcend in immediate importance those difficulties which beset our pathway when this association was organized.

It is, we believe, the conviction of all our people that the development of the field of industrial gas, of house-heating and other building heating and of water heating, offers our greatest opportunity for the expansion of our business. To develop properly the industrial load we have engaged in a campaign of research covering the next five years. This is in capable hands and no part of the work may be undertaken without direct authority from the executive board. This campaign has been supported by widespread publicity in the industry, and a gratifying response has been made by our larger gas companies to the request for contributions to underwrite the necessary funds.

Competition With Other Fuels In Domestic Field

There is growing competition with other fuels in the domestic field. Our statistics indicate that this side of our business, except for lighting, has more than held its own. The domestic output has increased during the life of the association both in the percentage of the total output of gas, and in the average use per consumer. Domestic heating has taken up a portion of the lighting load, which in 1920 still represented 20 per cent. of our total send-out.

We must, however, take aggressive action to enlarge our domestic load. The Commercial Section of the association has definite plans for sales stimulation. Its activities should be adequately financed and receive the practical support of our executives. It has been amply demonstrated in our history that the American people can be sold on any worthy article of consumption by adequate sales methods.

To handle increased business we must have proper rate structures. Our committes on this subject have done notable work, but the industry itself has as yet shown no adequate appreciation of its importance. We must continue to urge the vital necessity of applying the economic principles that underlie scientific rate structures and proper bases for valuation in adequate rate-making.

Technical Progress

The basis of our industry is technical, and we should use the greatest effort to increase our knowledge and experience in all known technical subjects relating to the gas business. Technical research along practical lines in all fields that directly affect or impinge upon the gas industry should be encouraged and promoted by the industry itself and by co-operation with other associations, industries and interests, and our information from the world over on such subjects should be up-to-date and complete.

The association has demonstrated its interest in proper protection of the public by financing research in matters connected with asphyxiation and resuscitation and in taking steps to educate our customers.

As further evidence of our good faith in the protection of the public and in the development of high grade gas burning appliances, we have established the Gas Appliance Testing Laboratory in Cleveland. The laboratory should have the earnest moral and material support of everyone interested in the gas industry.

Displays of Industrial Appliances

We believe the association should assemble, so far as possible through the aid of local gas companies, in cities where appropriate conventions are held, displays of industrial heating appliances, to be exhibited at these conventions, accompanied by a supply of printed material and explained by an authorized representative fully competent to advise inquirers.

For the past year we have been engaged in a campaign of advertising gas for industrial heating, in trade journals, covering these industries to which we desire especially to appeal.

Such expenditures for national advertising as the executive board may, after its thorough canvass of the subject, regard as warranted by the results to be achieved, should be adequately financed.

It is of the utmost importance that we continue our campaign of education by proper presentation along the lines now so capably followed by the Committee on Co-operation with Educational Institutions. We can attract a superior class of young men from the technical schools by adequate instruction. It is obvious that to attract highly trained men to the industry, careful thought must be given to the adequacy of their compensation. In colleges and schools we can educate the next generation in a correct appreciation of public utility economics and regulation.

We should have available at all times for our members and for the financial public the correct analyses of the essential statistics of the industry. Association headquarters has already made gratifying progress along these lines.

Our relations with affiliated associations are excellent and should be broadened and strengthened.

Ours is a national and not a sectional association. From all points of view it has been found best in recent years to hold our conventions in Atlantic City.

We must, however, recognize the claims of other sections of the country.

Disconnected Efforts Bad

A weakness sometimes discernible in our organization is the tendency of sections and general committees of the association to work independently of each other. Each section and committee (naturally and laudably) wants to make a good showing during its year in office; hence a tendency to concentrate upon its own immediate objective to the exclusion of all other considerations; but the association interest lies in continuity of effort and cumulative results. Section and general committee work should be guided with this in mind, that programs and activities may be continuous, and related activities co-ordinated for the utmost of unity and effectiveness.

Certain changes in the constitution and by-laws can well be made. One of these refers to classes of membership, and there have been suggestions that in other respects our accumulated experience will justify modifications of our by-laws to suit the development of the times

We have thus pointed out what we regard as among the most important activities in which the association and the industry should engage for the coming three-to-five-year period, and specifically,

Recommendations

We recommend:

That intensive efforts be made to secure co-operation within the gas industry and with all practicable enterprises and activities outside of the industry, to improve selling methods, to stimulate selling efforts, to enlarge understanding and appreciation of gas service, with special emphasis upon conservation and expansion of the domestic load, upon water heating and house-heating as additions to the domestic load, and upon large-volume use of gas in commercial and industrial enterprises.

That an educational campaign be carried on, both in and out of the industry, having in view the application of proper rate structures and proper bases for valuation in adequate rate-making.

That technical research in all fields affecting the gas industry be intensively prosecuted.

That especial and continued attention be given to the subjects of asphyxiation and resuscitation.

Support for Testing Laboratory

That every effort be made to enlist co-operative support of the testing laboratory.

That the association assemble, so far as possible through the aid of local gas companies, in cities where appropriate conventions are held, displays of industrial heating appliances to be exhibited at such conventions.

That the campaign of advertising, in trade journals, gas for industrial heating, be continued.

That the association form a special committee of executives, commercial men and manufacturers to work out a co-operative plan of national advertising.

That the campaign of education be continued, and that co-incident with this work the association support courses in gas engineering and fellowships in educational institutions.

That the statistical work of the association be kept responsive to the needs of the industry.

That a general policy be adopted which will recognize the just claims of the several sections of the country, as to the time and place of the annual conventions.

That a study be made of necessary modifications of the by-laws.

That there be continued adherence to the policy that the association shall not extend its work beyond those objects which are of first importance and greatest practical value to the industry, it being obvious that if its activities become broadened beyond the scope of practical accomplishments, its influence will be inevitably weakened.

Question of Available Association Funds

In regard to the important subject of providing funds with which to meet any additional expense involved in favorable action on certain of the committee's recommendations, we feel that, as soon as it is feasible to do so, the association should pay for the various undertakings out of its resources, secured through dues or other direct subscriptions to its treasury.

To continue indefinitely the practice of soliciting contributions from the limited number of the larger companies that now support such activities, would, we believe, be inconsistent with the avowed purpose of those who founded this organization and those who have guided its affairs to the present time, to encourage the greatest possible measure of co-operative action, with distribution of burdens and proper participation in its councils. Every member should contribute a just share of the funds to finance its activities.

We recommend, finally,

That the president be authorized to appoint a committee to formulate plans for providing the funds required to meet the foregoing recommendations, said committee to report its findings at the earliest practicable date to the executive board for consideration and action.

Respectfully submitted,

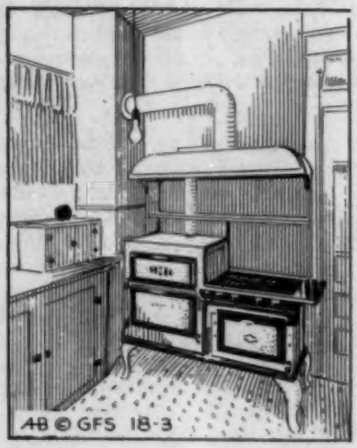
Special Committee on Three-or-Five-Year Program for American Gas Association Activities.

You Can Do It Better with Gas *

Arranging gas outlets and appliances in kitchen and basement

TRUISMS old yet ever new—concerning the proverbial chain which can claim no greater strength than its weakest link, the stitch in time saves nine, the little drops of water and little grains of sand which make the mighty ocean and the beautious land—if we but heed their humble admonitions do much to open our eyes to the mighty reformation which science and skill and time have wrought in our work-a-day world, "little by little and bit by bit."

Perhaps no one household device (save perhaps the old oaken bucket) has undergone more radical and glorified reformation than the very heart of the home—the gas range. The cook stove of our grandmother's day has long since been relegated to the "hall of famous backache producers" and the unwieldy, ornate gas range of our mother's day with its jerky, smelly flame, its inadequate cooking surfaces and unreliable heating mechanism is fast becoming extinct and in its place behold! the modern gas range—with its smart console lines—its convenient table drawer level—its large roomy ovens and smooth cooking surfaces—its steady, dependable flame, its reliable mechanism—its beauty and endurance, and step-and-time saving devices.



Keep Cool in the Summer by Placing the Gas Range Near a Window

A Convenient Arrangement for the Range Is Between the Kitchen Cabinet and Sink with Its Bright Window Above

Modern Gas Range Model of Perfection

For the modern gas stove (which may be kept clean as easily and satisfactorily as a piece of fine china) with its sparkling nickel and glowing enamel combines utter dependability with rare beauty and lifts from the heart of the most inexperienced little housewife the insidious fear of failure in cooking and the dread of wasted steps and tired backs. Everything about the modern gas stove is as perfectly regulated, as exquisitely wrought, as sure and unvarying in performance as the finest automobile or the most highly tuned radio.

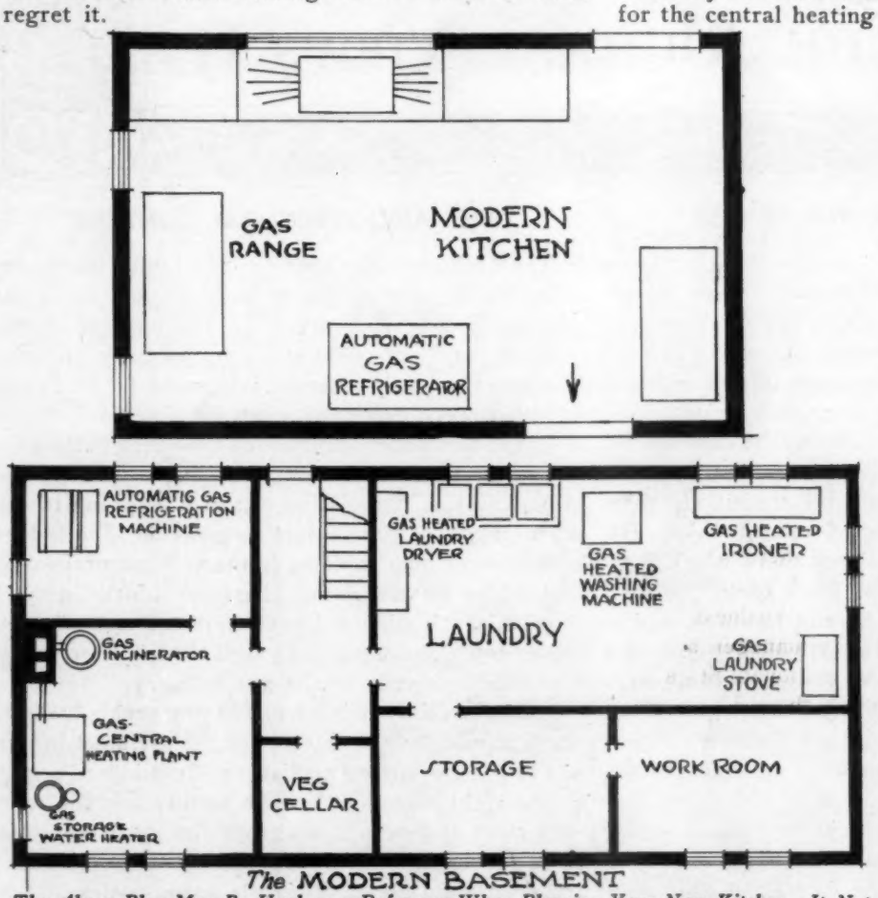
Built to be time-saving, "tired-saving," the gas range of today crowns its own purpose by becoming also a delight to the eye, a highly decorative unit—a glowing, charming object wherever it is placed. And in the kitchens of today, with their bright tiled floors and walls and daintily curtained windows the glowing, shining gas range finds a delightful and comfortable setting. Every year manufacturers, architects and contractors combine in sincere efforts to produce greater efficiency plus greater beauty in kitchen equipment.

Include Sufficient Gas Outlets In Your Building Plans

In building a home, too many often make the mistake of not providing for sufficient gas connections.

* From "The Modern Home."

This is a modern age, and old-fashioned appliances are out of place. It is better to provide for these conveniences while building than to wait and then regret it.



The MODERN BASEMENT

The Above Plan May Be Used as a Reference When Planning Your New Kitchen. It Not Only Suggests Good Arrangement for the Modern Kitchen and Basement but Indicates Proper Gas Outlets Which Should Be Considered in Your Building Plans. Prepared by The Laclede Gas Light Co.

Gas is being put to many uses these days, and its many conveniences are unchallenged. You wouldn't think of doing without a gas range in the kitchen. Of all kitchen appliances, the gas range is the most important.

It would be well to have not less than nine gas connections in the basement. Gas is coming into prominence in house-heating, and should you decide to heat your home with it, a gas outlet is necessary for the central heating plant. These heating plants are being improved continually and now can be automatically controlled.

The Water Heater

Another is required for the water heater. Hot water is essential in the home and gas heaters are the most convenient and economical. They are also automatically controlled, and are equipped with safety pilot lights and temperature and pressure valves.

Gas refrigeration is one of the newest features. These systems are automatically controlled, and supply dry air that keeps the temperature in your refrigerator, fifteen degrees colder than ice. Automatic gas fired incinerators are valuable adjuncts and are found in many modern homes.

If you have your house sufficiently piped, you'll find it a relief to set up a vented radiant fireplace heater to furnish cheery warmth on cool evenings in the Spring and Fall. It saves operating the furnace in mild weather.

Then there's the gas laundry dryer with thermostat, gas-heated ironer, washing machine and laundry stove. Gas is being put to more uses constantly, so it is well to prepare for these comforts when building.

BAKERS SPEND $18,000,000 FOR FUEL

The baking industry of the United States yearly consumes fuel valued at more than $18,000,000 in baking bread and cake for the American public. Of this amount, anthracite leads with $5,970,000, gas a close second with $5,250,000, bituminous $3,607,000, coke $2,632,000, oil $698,000, electricity, wood and miscellaneous fuels about $500,000.

Great progress has been made by the baking industry during the past few years in improving and maintaining a uniform product. In accomplishing this, the industry is depending more and more upon highly efficient automatic machinery for the preparation and baking of its products, and in this, the uniform control of heat at predetermined temperatures has played a most important part. To get this uniformity of heat control, the industry has turned more and more to manufactured gas, wherever it is available.

As The Journal Views It

THE GAS SALES CONFERENCES

The gas sales conference recently held at Lake Mohonk, N. Y., and also in Gloucester, Mass., a continuation of the work started a couple of years ago, were signalized by well-deserved success. Gas men and the association are to be congratulated on their enterprise.

The value of these conferences to the commercial man cannot be over-estimated. At general conventions and meetings, to be sure, the commercial man may learn much that will be of value to him. He will, of course, make associations there which may bring him great returns. Too much cannot be said about the benefits, both social and business, which can be derived by the gas sales manager and the gas salesman who attend the National, State and District Conventions. However, there is no gainsaying that the programs of such conferences are by any means limited to commercial matters. Other branches of the gas industry must be considered and the program will, at times, contain but little of direct interest to the commercial gas man. This is simply a condition that is due to the diversified character of our industry and is not to be considered as a criticism of the program-makers, for it is also a fact that there is never a program presented at a convention which does not contain something of interest to the salesman.

However, at the aforementioned conferences, the salesman found that the program was limited entirely to commercial matters. Here he had an opportunity of meeting primarily commercial men, men who are interested in the same thing as he is. And it was not all work, either, for plenty of opportunity was presented for play. For, by the proper mixture of work and play, there is no question those that attended gained much of material and spiritual value.

Sales conferences are still somewhat of a novelty in the gas industry and it is our desire to extend to the managers, or those who have promoted this enterprise, our best wishes for continued success. It is a fine undertaking and one that deserves the support of the entire industry, and, of course, most particularly of those gas men who are engaged in the commercial end of our business.

THE ARCHITECTURAL CONTEST

The Architectural Contest conducted by the American Gas Association was recently brought to a close and the prizes were awarded. The purpose of this contest was, of course, to gain publicity for gas, and the results, it must be said, were far in excess of what were originally expected.

In the first place, the calibre of the men participating in the contest was extremely high. In fact, the American Gas Association can well be proud of the high quality of the contest in general. The judges were men of high standing in the architectural world and all in all the entire character of the project was eminently dignified and interested men all over the country and Canada as well, who can certainly be valuable friends to the gas industry.

It was certainly worth while having such a contest, for it stimulated the interest of the architect in gas and in gas-consuming appliances. It is indeed a step in the right direction, for the architect is the man who must first be sold on gas if the gas industry is to be successful in obtaining the widest possible distribution for its products in the communities that it serves. If the architect is sold on gas he will advise the installation of outlets for all sorts of gas-burning appliances in the home. He can also be instrumental in promoting the use of gas in other buildings such as factories, offices, theatres, churches and the like.

It may be that the gas industry has neglected the architect somewhat up to the present time, but it is certainly now making amends and exerting every effort to get the architect interested in gas and to teach him the value of gas, so that he may transmit this knowledge and use his good influence in urging the use of gas in the buildings he plans for his customers. It is to be hoped that the American Gas Association and the gas industry in general will take further steps to keep in touch always with the architect, and to bring to his notice all new developments and improvements, so that he will be able to recommend the latest and best appliances manufactured for the use of gas. Such efforts cannot help but be rewarded with success, and will form but another potent factor working to advance the interests of the gas industry of America.

INDUSTRIAL GAS LESSONS

IF IT'S DONE WITH HEAT — YOU CAN DO IT BETTER WITH GAS

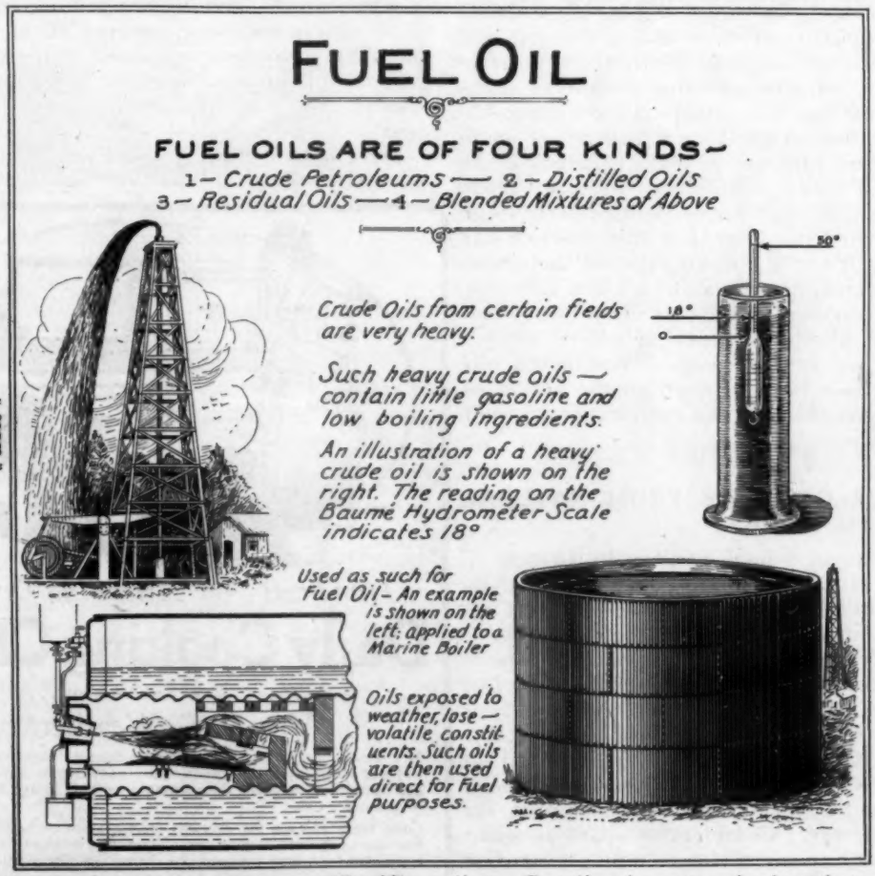
Lesson No. 126

Combustion

Fuel Oils

It has been mentioned in a prior lesson that petroleum or crude oil consists of a mixture of a large number of various substances which are mostly hydrocarbons:—that is, compounds of carbon and hydrogen. Nitrogen, oxygen and sulphur are also found in petroleums, all in combined form with each other, and with carbon and hydrogen as well, but characterized by a more or less well-defined specific gravity and boiling point and also by various other characteristics.

The general procedure is to distill the petroleum and not to use it as such. For the lower boiling point constituents of petroleum possess far too great a value to be used as mere fuels. Thus the lightest and hence the lowest boiling point distillate is gaso-


FUEL OIL
FUEL OILS ARE OF FOUR KINDS—
1—Crude Petroleums — 2—Distilled Oils
3—Residual Oils — 4—Blended Mixtures of Above
Crude Oils from certain fields are very heavy.
Such heavy crude oils — contain little gasoline and low boiling ingredients.
An illustration of a heavy crude oil is shown on the right. The reading on the Baumé Hydrometer Scale indicates 18°
50°
18°
0
Used as such for Fuel Oil—An example is shown on the left; applied to a Marine Boiler
Oils exposed to weather, lose — volatile constituents. Such oils are then used direct for Fuel purposes.

line. Gasoline is not a single substance but a mixture of various low-boiling hydrocarbons and the same consideration holds good for all other distillates from petroleum. They are not simple substances but mixtures of hydrocarbons.

After the gasoline comes kerosene, which has an

the amount of these substances are very small. The hydrocarbons that exist in crude oils vary considerably in their properties, and possess quite different boiling points and specific gravities. It is possible, therefore, by subjecting the crude oil to distillation to obtain from it a series of products or distillates each

approximate specific gravity of 44 degrees Baume. Then comes the gas oil, which is approximately 35 degrees Baume. This is followed by the light fuel oils with a specific gravity of 18 to 30 degrees Baume, then the lubricating oils, and finally the heavy viscous residues with a gravity of 10 to 14 degrees Baume. The latter are left behind in the still.

When we talk of fuel oil, we generally think of a substance in the liquid form derived from petroleum which can be used for the production of heat for one purpose or another. Haslam and Russell in their book on "Fuels and Combustion," classify fuel oils into four general classes. In the first class there are the crude petroleums, then the distilled fuel oils, then the residual fuel oils and then the blended fuels.

Crude Petroleums

Some petroleums are found which have a very high specific gravity and which contain, therefore, practically no lower boiling hydrocarbons which are of such high value. In other words, these crude oils like the Russian oil from Baku district, and also certain American oils from California, have practically no other commercial value except as fuels. These are the oils that are employed for the generation of heat in their original state and it is only in that condition that such use of them is justified. In former days it was customary to use crude petroleums that contained a considerable percentage of gasoline for fuel purposes, but this practice has entirely ceased, due to the discovery and the development of the cracking process which has correctly been called the "saviour" of the petroleum motor fuel industry. It is also sometimes necessary to use weathered oils for fuel purposes. Weathered oils are those that have been exposed to the action of the atmosphere resulting in the evaporation of their volatile constituents.

¤ ¤ ¤ ¤

RECOVERY OF GASOLINE FROM NATURAL GAS

This is the title of a book written by George A. Burrell, Chemical Engineer, D.S., and published by the Chemical Catalog Company of New York City, as part of the American Chemical Society series of Scientific and Technologic Monographs.

The book discusses the very important product of natural gasoline, which is now being made by about 1,200 natural gas plants in the United States. The history of the industry takes up the first part of the book, and there is also included therein a special chapter defining the various special terms that are used in this industry. Considerable space is spent in discussing the various methods that are used in recovering the gasoline, and this includes descriptions of pumps, gas engines and compressors, cooling systems and other parts of the plant. The latter part of the book is concerned with methods of testing the gasoline and of evaluating its quality. There are many special chapters in the book pertaining to particular phases of the industry, such as gas leases, chemistry of natural gas, testing natural gas to find how much gasoline can be obtained from it, purifying the natural gas, depletion of properties, etc.

The book as a whole is a very excellent contribution to our knowledge of the technology and general economics of the natural gas industry. It contains a great many valuable tables and illustrations and is in reality a valuable handbook for the natural gas engineer.

¤ ¤ ¤ ¤

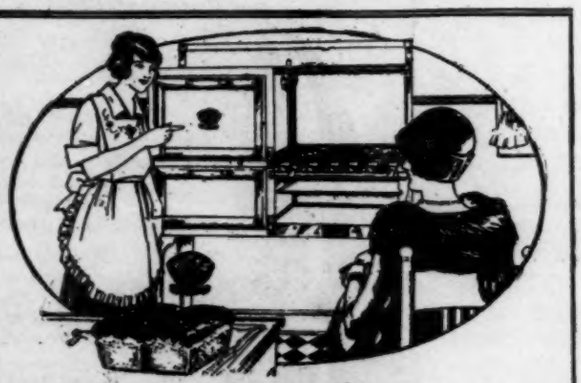
YOU START AND I'LL FOLLOW

J. B. Dillon

THE use of rubber rings in pipe lines covers a much longer period of time than many people realize. The honor of the first installation must ranges that this was the way to sell gas ranges Several Denver department stores are holding daily cooking classes and the lady experts are telling their women callers just how to mix this and that and see how lovely this gas range bakes everything. You can do the same if you had one of these ranges.

Of course they can, because all of the stores are handling first-class ranges and no one disputes the fact that uniform heat is necessary for skillful baking, and that the uniformity of heat is found best in a gas range.

Here's how the American Furniture Company advertised it:



Hundreds Are Attending Our

Daily Cooking Classes

Under Supervision of

Mrs. D. G. Weatherman

Mrs. Weatherman is late of the Domestic Science School at 18th and Broadway and her ability is well known to her many friends. Mrs. Weatherman has had many years of public demonstration work in Chicago, St. Louis and other large Eastern cities.

Come today and see the delicious recipes prepared before your eyes and hear them explained, step by step. Taste the delicious Muffins, Puddings and Cakes fresh from the oven of a Buck's Gas Range which Mrs. Weatherman is using for this week.

Here's the Menu for Thursday and Friday

THURSDAY	FRIDAY
Cannelon of Beef With Hot Mayonnaise	Veal Cutlets
Berry Muffins	Graham Pudding Spinach
Arlington Asparagus	Angel Food Cake

Classes are daily from 10 to 11 a. m. and 2 to 4 p. m. You are cordially invited to attend these classes during the hours stated above.

GAS MERCHANDISING

Domestic – Industrial

Ideas for the Man Who Sells

William H. Matlack

ON TRADE-INS

WHEN you trade-in or make an allowance for an old coal, wood, oil or gas stove, it is a mistake not to take the old stove into consideration when planning your Allowance sale. In arriving at your mark-up the old stove should be entered as a cost item. If you are in the habit of reconditioning these old stoves and reselling them, you

"Hold 'er Sam, or I'll drop 'er!"

should use the average resale price, as a factor against which you charge cost of disconnection, moving and putting in shape for resale and redelivering and connecting. The difference between allowance and cost of resale should then be used as a factor in arriving at the mark-up price of ranges to be featured in your allowance sale.

✡ ✡ ✡ ✡

SALESMEN ARE NOT UNCLE TOMS

THIS matter turn-over of salesmen we hear so much about is frequently chargeable to the man who is in charge of the salesmen. In some cases he does not know his gas appliances; in others he has had an overdose of pep bulletins from a man who never faced the home-manager save the one who said, "I wear the pants here and don't you dare bring that wet umbrella into this house, Henry." Or the fellow who thinks it smart to be hard boiled, to crack the whip just to see 'em jump. If you have a big turn-over of salesmen, Mister President, or Mister Vice-President, or Mister General Manager, you may do well to look into the upper strata of your organization. You may find a Simon Legree.

✡ ✡ ✡ ✡

WHY NOT "VISIT OUR STORE"?

FOR a number of years we have been talking about "The Store, Your Store and Our Store," the idea being, though we have not before expressed it in so many words, to get away from the word "office" in connection with our merchandising activities. Some of the gas companies are now asking the customers to visit their "store" and others refer to branch "stores." The question is, would it not be a good idea to use the word "store" in place of the word "office" in connection with all merchandising efforts? We know of one large holding company that has the matter under advisement. What is your opinion?

✡ ✡ ✡ ✡ ✡

SERVICE AND COURTESY

WHEN the customer comes in with a complaint, don't send him or her from pillar to post. That irritates!

Classify all complaints.

Study the cause of complaints; eradicate them at their source.

Completeness of your reply is only one-half of courtesy; the manner of your reply is the other half.

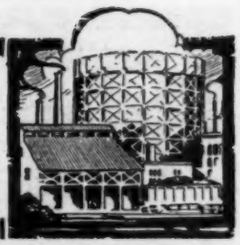
Be polite and pleasant, thus making the person glad he or she called on you.

Show individuality to each customer; make him feel he is "Mr. Citizen," and you are just one of the throng.

Get the other fellow's point of view.

Don't argue; inform.—Current Topics.

NEWS OF THE GAS INDUSTRY



Michigan Gas Men Meet in Joint Convention

Hold Successful Meeting — Replete With Business and Entertainment Features

The annual convention of the Michigan Gas Association was held in conjunction with the Michigan Electric Light Convention on June 24th to 26th, 1926, inclusive, at the Grand Hotel, Mackinac Island, Michigan. The convention was one of the most successful ever held by the Michigan Association and the attendance this year was the largest ever obtained. Many ladies were present, they being about one-third the total of attendance. The entertainment features were particularly successful. There was much excitement over the drawing of valuable prizes contributed for the occassion. Everybody enjoyed the meeting immensely, because of the unusual facilities offered at this northern summer resort and it's said that the sentiment is strong for holding the convention there again next year.

The business meeting of the Michigan Gas Association opened on Thursday morning, June 24th, with an address by the President, B. G. Campbell. In his address Mr. Campbell touched upon the various activities of the Association during the past year and referred to the many problems that are agitating the minds of the gas men today. He went into considerable detail to explain the manner in which increased consumption of gas can be obtained in the domestic field, and he particularly showed by a detailed analysis the effect on the plant of having 100% water heater customers. He also spoke about house heating and gas refrigeration, paying rather particular attention to the latter development, which is interesting to gas men all over the country at the present time.

Report of Rate Committee

The President's address was followed by the report of the Rate Committee, F. A. Newton, Chairman. This report was concerned particularly with the house heating and industrial phases of the rate-making problem. It was followed by a paper on "Demand Gas Meters," by E. Hardy. The morning session was closed by a very interesting talk on the work of the commercial section of the American Gas Association, which was given by Mr. R. J. Canniff, Chairman of the section.

Joint Session Friday Morning

On Friday morning, a joint session was held, of the two Associations. The meeting was opened by Chairman A. C. Marshall of the Michigan Committee on Public Utility Information. This was followed by a report by Alfred Fischer, Director of Information Bureau, and then by a dramatic sketch, "Satisfying the Customer," by two young ladies impersonating the customer and the telephone clerk of the Utility Company. Alexander Forward, secretary and manager of the American Gas Association, gave an address in which he particularly emphasized the approach of the destiny of the gas industry to supply the industrial fuel of the world. He also mentioned the house heating fuel as being peculiarly adapted to the use of gaseous fuels.

Gas Men Meet Alone on Saturday Morning

The meeting was opened Saturday morning, with a report of the Fellowship Committee, F. W. Seymour, Chairman. It described the Research Work being done at the University of Michigan. This was followed by a paper on the disposition of ammonia by-products by H. W. Jackson, present holder of Fellowship. The next paper, which was to be presented by Professor McColl of the Michigan State College, was held over due to his absence.

Several short talks were given on the Waterless Gas Holder by Arthur H. Anderson of Detroit City Gas Co., and "Experiences with Gas Ovens at Kalamazoo," by Chas. A. Barthold.

Frank W. Steere of the Steere Engineering Co., spoke of how new developments in the water gas process are reflected in the cost sheet. J. B. Wootan of the Public Service Magazine, Chicago, delivered a talk on "A Message to the Gas Industry."

The officers elected were: President, Chas. R. Henderson, Ann Arbor; vice-president, Frank W. Steere, Detroit; secretary-treasurer, Albert G. Schroeder, Grand Rapids.

* * *

Iroquois Gas Corp. to Add to System

Albany, N. Y.—The Iroquois Gas Corporation today petitioned the Public Service Commission for permission to operate natural gas transmission lines in the towns of Golden and Boston, Erie county, where the company has recently located some gas producing wells. The company now plans to build transmission lines, under local franchises to carry the added natural gas to its existing system.

* * *

Gas Company Gets Lighting Contract

Albany, N. Y.—The board of contract and supply has awarded the contract for lighting Albany's streets and parks for the next five years to the Municipal Gas Company at the same rate as for the last five years.

Program Details of Canadian Meeting

Montreal, Canada—The following program gives details of the entertainment features awaiting the gas men who go to Montreal for the Canadian meeting:

WEDNESDAY, JULY 7, 1926

9 P. M.—Executive Committee meeting at Mount Royal Hotel.

THURSDAY, JULY 8, 1926

9 A. M.—Registration of delegates will take place in Convention Hall lobby, Mount Royal Hotel. Delegates advised to register promptly, and to obtain convention badges, entertainment tickets, etc., at registration tables between the hours of 9 A. M. and 10 A. M.

10 A. M.—Meeting called to order by the president. President's address and welcome. Minutes of last meeting. Executive Committee's report. Secretary-treasurer's report. Appointment of Nominating Committee for Election of Office Bearers for 1926-27. (The report of the Nominating Committee to be presented at the afterhoon session July 8, 1926.) Reading and discussion of papers.

1 P. M.—Meeting adjourns for luncheon.

2.30 P. M.—Opening of afternoon sessions. Report of Nominating Committee. Reading and discussion of papers (continued).

5.30 P. M.—Adjournment of first day's sessions.

7 P. M.—Dinner and habitant night at Mount Royal Hotel. (Dr. Abbott, historian, will give a speech on Old Canada, and others will give old French songs and country dances.) Delegates can obtain dinner tickets, to cover dinner and entertainment, at registration wicket. Price $4.50 each. During first day's sessions ladies of party will be free to do sightseeing, shopping, etc.

FRIDAY, JULY 9, 1926

9.45 A. M.—Convention sessions resumed. Reading and discussion of papers (continued). Report of representatives, Managing Committee, American Gas Association. Opening of question box and discussion of many vital problems affecting the gas industry in Canada. Delegates are free to take part in this discussion. Much information of value, covering gas plant and distribution work, can be obtained through a question box discussion.

11.45 A. M.—While delegates are in session, the ladies of the party will be given an automobile ride to historic St. Eustache, with lunch at an old French inn. Returning shortly after 3 P. M. 1 P. M.—Close of convention sessions and adjournment for luncheon.

FRIDAY AFTERNOON, JULY 9, 1926

Visit to the LaSalle Gas Works

There will be no formal visit to the LaSalle Gas plant, but delegates desiring to see this wonderful plant will be welcome to do so. At LaSalle there can be seen three unusual 12-foot automatically controlled water gas sets, liquid purifiers and a new booster pumping one and one-half million cubic feet of gas per hour at ten pounds pressure. For information on how to get to the plant apply at registration booth.

Municipal Gas Co. Has Picnic

Albany, N. Y.—More than 1,500 employees of the Municipal Gas Company enjoyed the fourth annual picnic of that organization this week at McKown's Grove. Field sports, games and dancing were in the program. A fleet of buses of the Albany Transit Company., Inc., conveyed the picnickers to and from the grounds. A well-planned program run on schedule time and a picnic lunch in the grove were features of the day.

The picnic was in charge of the following committee:

L. P. Richardson, chairman; E. B. Shevlin, J. L. Eberle, Miss Mary Ray, L. D. Parmalee, Miss Lillian Jones, William B. Kirk, Miss Catherine Ryan and Donald Crawford.

The LaSalle School band furnished music during the afternoon, and an orchestra played for dancing.

N. E. Industrial Men Hold Annual Meeting

Listen to Final Lecture of Industrial Gas Course at M. I. T.

By inviting all members of the Industrial Gas Association Division of the New England Gas Association to the final morning lecture of the Industrial Gas Course at the Massachusetts Institute of Technology, this lecture was virtually made a part of the annual meeting. The lecture was on "Installation and Maintenance of House Heating Equipment," and was given by Robert D. Stuart, Jr., the industrial service engineer at Woonsocket, R. I., of the Blackstone Valley Gas and Electric Co. The very large attendance at this lecture showed the great interest gas men in New England are taking in house heating.

Mr. Stuart took up the installation and servicing of both hot water and steam boilers. He pointed out that in hot water systems special care must be given to making certain that the circulation will be perfect. In steam boiler installation adequate return pipes must be provided to prevent water going over into the system with the steam.

Flash backs he said were annoying and at times were not discovered until carbonization had fouled the burner or burners and the inside of the boiler. By centering the spud and carefully adjusting the mixture of air and gas, this problem can be made much simpler. It is also necessary to see that the spud is not burred and that all connections are tight so that excess air will not leak in.

The noise made by the burners when the boiler is operating under pressure and the pressure control causes frequent shutting off of the gas, Mr. Stuart said could be remedied in a number of ways. One way is to adjust the pressure control in such a manner as to give a greater range.

Frequent Inspections

His company, he stated, makes two free inspections a year and he emphasized the importance of having inspection blanks for the inspectors to fill out toward the end that the exact condition of the installation may be on record and also in order that the inspector will not get careless and neglect some part of the inspection.

The thermostat, he said, should be located at a spot of average temperature rather than in the warmest or the coldest room in the house. If the cellar is cold, part of the covering may be left off the pipes, but as the heat will usually be needed in the cellar only during the coldest weather it is better to instal a radiator and better still to run bare pipes around the cellar so the heat will be more evenly distributed. The radiator or the special radiating pipe may be closed off with a valve when the heat is not required in the cellar and a somewhat higher year round efficiency of the heating plant is thus secured.

Mr. Stuart also took up and described various safety controls that are used on gas boiler installations. The talk lasted from nine till noon with a short intermission at half past ten.

After this meeting the members of the industrial gas course and the members of the Industrial Gas Association Division of the New England Gas Association gathered at one of the entrances to the M. I. T. building in which the course was conducted and had a group picture taken. Immediately after this everyone went over to the Riverbank hotel for the dinner which is held annually at the close of the course.

Secretary-Treasurer Phelon Makes Annual Report

Following the dinner Secretary-Treasurer R. J. Phelon made his annual report. This report showed the finances of the organization to be in sound condition and showed an increase from 105 members at the beginning of the fiscal year to 127 at the end. The average attendance at the meetings was 56 with the largest attendance at the four house heating meetings held. The attendance at these meetings indicated how great the interest is at present in house heating with gas. At all the meetings, however, the attendance was very good, and the increase in membership shows how much interest is being taken in the association.

New Officers Elected

President E. L. Woods then called for the report of the nominating committee, consisting of J. H. Summer, chairman, R. B. Smith and S. A. Mace. Mr. Summer read this report which nominated the following officers: For president, R. J. Phelon, of Worcester; for vice-president, E. W. Berchtold, of Boston; for secretary-treasurer, J. J. Winn, Fall River. Members of the executive committee: J. D. Clark, C. S. Hilton, C. G. Peterson, H. J. Ayling and S. A. Good.

These nominees were unanimously elected through vote of the members to instruct the secretary to cast one ballot.

Directly after the election of officers there was a presentation of tokens of remembrance to Prof. Wilkes, Bates and Thompson of the M. I. T. staff who conducted the industrial gas course. President Woods did not make a set speech surveying the work of the year but he did urge everyone to make it a point to attend the meetings held by the local chapters of the American Society for Steel Treating. Also if possible gas men should attend the national show of this association. He pointed out that the gas men were not as well known and the use of gas not as much emphasized in the A. S. S. T. meetings as should be the case. The electric men are taking a very active interest in the meetings and the gas men must, if gas is to enjoy its proper place in the programs of the chapters.

He also urged the men who had just completed the course at M. I. T. to become members of the Industrial Gas Association Division of the New England Gas Association and to attend the monthly meetings.

Mr. Freeman Addresses Meeting

President Woods next called upon F. C. Freeman, vice-president of the Providence Gas Co., and president of the New England Gas Association, to make a few remarks. Mr. Freeman said that this was not a commencement for those completing the gas course because all were already in the industrial field. The course was more in the nature of brushing up on some of the principles that had been hazy, but those who took the course would not be better men on account of having taken it till they began to apply and to use the knowledge that had been gained. A person is no better than his ability to apply knowledge.

The industrial gas field is a field that is virtually unscratched. Wherever heat is being used there is an opportunity to apply gas. Though gas may cost more than some other fuels there are advantages that offset the extra cost. Gas may mean better quality of product. It may mean greater uniformity. It may bring about a reduction in labor. It may make it possible to use less floor space. It is such factors as these which have to be considered.

Charles R. Prichard, vice-president of the Lynn Gas and Electric Co., was the next person called upon to speak. He stressed the human nature side of the business. All prospects are human he stated. Though a prospect's idea and viewpoints may seem absurd—yet there they may be right. In any case he must be pleased. For to do business customer confidence must be gained.

J. J. Quinn Talks on the Industrial Gas Course

President Woods next called upon John J. Quinn, vice-president of the Quincy Gas Light Co. and chairman of the Industrial Gas Course Committee. Mr. Quinn was also a member of the first industrial gas course. He stated that from the beginning the course has improved and the classes have become better and better. He quoted one of the speakers at the Gloucester Conference as saying that the future leaders of the gas industry would come from the industrial men.

He remarked that at this meeting there was the largest attendance there had ever been at an annual meeting, indicating a con-

stantly growing interest in industrial gas and in the association and the gas course. Industrial gas, he concluded, is attracting more and more attention.

Clifford E. Paige, vice-president of the Brooklyn Union Gas Co., was introduced as the father of the industrial gas course at M. I. T. In his introductory remarks he stated that he could hardly claim to be the parent of the course because there were others who were also responsible. He went on to explain that some years ago he had prepared a paper to read at a convention. It happened that he did not read the paper there but did read it later at a meeting of the Guild of Gas Managers. In the paper he pointed out some things which he thought the gas industry needed and in the discussion which followed he was asked how the condition he had pointed out could be remedied. It was the industrial gas aspect of the gas business which he emphasized most and which attracted most attention.

As a result of this paper he and a few other men including Mr. Prichard, then at Lowell, met with the authorities at M. I. T. and talked over the proposition with them. There seemed a possibility of establishing a course that would correct some of the weaknesses then existing in the industrial gas field.

An appeal was made to the gas companies and the manufacturers, a laboratory was fitted up and the course became a reality. The fourth class has now been graduated.

Course Started On Firm Basis

The course started with the idea that the future of the gas business lies largely in the industrial field. It is a field where the salesman has to deal with highly trained men and the industrial gas salesman must be more than an engineer. It is the industrial man who is responsible for the success of the gas company. He is responsible for the future of an industry capitalized at more than four billion dollars and with annual sales of four hundred and twenty-five million dollars. Twenty-five per cent. of these sales are now in the industrial field.

Many gas men have been concerned with the consumption per meter per year. It has been the cause of some concern when the actual consumption per year per customer has been tabulated. It is realized that if there were not large users to offset the small ones and to raise the average there would be grounds for even more concern.

The gas business is passing through a phase. It has been passing through phases ever since it was established, but has passed through more during the past twenty years than in the past seventy. We have lost on gas lighting but we are gaining to a marked degree on industrial.

What you take away with you from the industrial gas course will have value to you and to the industry only to the degree that it is used. What you do with what you have is what counts. It is your business to fight for what you want, to show your superiors what is needed to make the industry grow and to strive to get what is needed.

President-Elect Phelon Adjourns Meeting

The president-elect, R. J. Phelon, was next called to the chair to adjourn the meeting. He called attention to the attendance at all the house heating meetings and the preponderance of those meetings during the past year. He asked that the members express their opinion in regard to the type of meetings they wished toward the end that the program could be arranged to give the members what they most wanted.

Mr. J. J. Winn, made a motion that the association send its greetings through Mr. M. B. Webber, to the Illinois Gas Association. The Illinois Association co-operating with the University of Illinois is conducting a summer course in industrial gas at the University of Illinois, and Mr. Webber is to deliver a lecture there. The Illinois course is modeled largely after the M. I. T. course.

* * *

Rudd Philadelphia Representatives Enjoy Picnic

Bridgeton, N. J.—Edwin C. Bartlett of Philadelphia, Eastern representative of the Ruud Water Heater Company, with the employees, their wives and children enjoyed a delightful picnic recently at Piney Point, N. J.

There were about 50 in the party and they arrived here about 10:30 o'clock, Saturday morning for a day's pleasure. They were met at the Central R. R. Tunnel by Supt. Jacob B. Jones and a few of the men from the local gas plant with their wives and children and were piloted to Piney Point where fun reigned supreme until 9 o'clock in the evening, when they motored back to Philadelphia, a tired but happy bunch.

There was an old fashion picnic luncheon, with a big keg of ice cream and after luncheon there was all sorts of games and out door pleasures. "Duck on Daisy," Tug of War, Spinning contest, races, a Charleston contest and a baseball game. The score ran up so high we would not dare mention it. Winners in the races and contests were presented with umbrellas for the men and parasols for the ladies.

Mr. Bartlett is quite well known here and a number of his Rotarian friends heard of him being here and paid the party a visit at the picnic. Mr. Bartlett has broadcast over the radio many times and is quite prominent in Rotary.

He entered into the spirit of a good time and with the guests from the local plant, helped make the day the great success it was.

Every year the company has a picnic and last year they conceived the idea of coming to this city and spending the day at our beautiful park.

Swimming and canoeing were enjoyed and snap shots and moving pictures were taken of the crowd.

* * *

Sprague Meter Opens Warehouse at Houston, Texas

The Sprague Meter Co. announces the opening of a new branch warehouse at Houston, Texas, where a complete line of standard meters is in stock. This new warehouse, in conjunction with the warehouse at Davenport, Iowa, assures prompt service to the Mid-Continent territory.

New Jersey Utility One of Five Largest

Expansion During Six Years Has Placed Public Service Among Leaders in Field

Newark, N. J.—Operating subsidiaries of the Public Service Corporation of New Jersey have expended $129,000,000 for capital improvements in the last six years. These betterments, with the normal expansion of the subsidiaries have placed the parent organization among the twenty largest corporations in the country.

From the standpoint of total assets the Public Service Corporation, the holding company, is the country's twelfth largest corporation. With assets aggregating $480,000,000, the parent company is the fifth largest public utility organization. Excepting the Consolidated Gas Company of New York, it is the largest organization of its kind on the Atlantic seaboard.

From an operating standpoint the corporation's subsidiaries are said to be in a more advantageous position than the few public utilities that surpass them in size. All of the properties and assets controlled by the corporation are located within a comparatively narrow strip of land, comprising some 1,800 square miles and extending from the northeastern part of New Jersey, adjacent to New York City, to Camden, directly opposite Philadelphia. This territory is the heart of the industrial and residential sections of New Jersey and includes some of the most thickly populated sections of the country outside of New York City. It has a population of approximately 3,000,000, and five out of every six inhabitants in the State reside within the territory served by the corporation.

The Public Service Electric and Gas Company, the chief subsidiary, exclusive of inter-company railway current, sold a total of 919,871,843 kilowatt hours of energy in 1925, against 280,871,843 kilowatt hours sold in 1916. It also sold 20,294,361,000 cubic feet of gas in 1925, against 12,399,852,000 in 1916.

Have You Copies of The American Gas Journal Since 1881?

In order to complete their files of the American Gas Journal, the New York Library has asked us to appeal to our readers in an effort to secure the numbers that are missing.

The issues needed are from the years 1881 to 1890.

If you have copies of the Journal which you wish to dispose of for any reason this will be a useful means. Please communicate with Mr. E. H. Anderson, Director of the New York Public Library, New York City, or with American Gas Journal.

Were we able to comply with the request of the Librarian of the New York Library we would gladly do so; but unfortunately we have only one set of the Journal for our files, hence the appeal to the generosity of our readers whereby they can display their public spiritedness which will be thoroughly appreciated by the recipient.

* * *

Oklahoma Gas Sold to N. Y. Firm

Oil City, Pa.—The Oklahoma Natural Gas Company, with outstanding capital of $14,300,000, has been sold to Pope, Richardson & Company, New York public utility and bond firm, for a consideration of $18,509,000.

Word of the consummation of the deal will go forward to stockholders within a short time.

The deal was consummated on a basis whereby the stockholders receive one-third cash and two-thirds in six per cent. 20-year first mortgage bonds. The par value of the stock is $25, with 572,000 shares. The cash involved is $6,090,000, while $12,500,000 will be covered by bonds.

The average selling price of Oklahoma Gas, which is listed on the Pittsburgh Exchange, has been about 29 the past few weeks, but with the word of the deal impending today, the stock went to 30¾ on the strength of the story.

Verification of the deal having gone through was afforded by Mr. Splane. Mr. Splane and H. J. Crawford, of Emlenton, are directors in the company, the stock of which is very largely held in Western Pennsylvania.

Four of the present Oklahoma company directors will represent their stockholders as bondholders in the purchasing company, of which they are to be made directors.

* * *

Luther Diehl, New Gas Supt. Chambersburg Co.

Chambersburg, Pa. — Luther Diehl, for years chief clerk at the Chambersburg Gas Co., has been named to succeed M. K. Burgner, superintendent, resigned. Mr. Diehl is a young man thoroughly familiar with the duties of the office to which he has been advanced. During his employment at the gas company offices he has established a record as an efficient and accommodating employee.

* * *

P. S. Mumma Leaves No. Ind. Public Service Co.

Lebanon, Ind.—Transfer of P. S. Mumma, Lebanon manager for the Northern Indiana Public Service Company, to the West Ohio Gas Company at Lima, O., and consolidation of the Lebanon and Frankfort units under the management of J. P. Darrat at Frankfort, was announced here today by S. S. Mulholland of Fort Wayne, vice-president of the Southern division of the Indiana corporation.

Mr. Mumma, who has been manager here for eight years and in the employ of the company for nineteen years, will have charge of the new business and merchandise departments of the West Ohio Gas Company, which is a part of the Insull interests.

Considerable opposition was expressed today over the announcement that the Lebanon office would be merged with the one at Frankfort.

Binghamton Gas Works Holds Its Annual Meeting

Binghamton, N. Y.—House heating by gas was one of the subjects considered by the annual meeting of the stockholders of the Binghamton Gas Works. The stockholders were informed that one test installation had been operated throughout the past winter with very satisfactory results, that other installations are to be made during the summer and that it is the desire of the company to provide this valuable service in its thousands of customers. Directors were reelected and the board of directors reelected the officers.

The following were reelected directors to serve for the coming year: Alanson P. Lathrop, New York City; William G. Phelps, Israel T. Deyo, Charles M. Stone. Hiram H. Woodburn, Edwin S. Truesdell, Charles W. Tither, Fred J. Baumann and Charles E. Bennett.

A report covering the operations of the company for the year ending April 30, 1926, was presented at this meeting. The total output of the company for the preceding 12 months amounted to 602,231,600 cubic feet, an increase over the previous 12 months of 8.7 per cent. with a corresponding percentage of increase in the company's operating revenue.

Contemplated additions for the coming year were estimated at approximately $465,000, the major items of which will be a new storage holder now under construction which will cost in the neighborhood of $265,000, a new service building soon to be erected at Liberty and Court streets and certain improvements in equipment at the manufacturing plant entailing an expenditure of approximately $40,000. The balance includes extensions and improvements in the company's distribution system.

The fact was brought out that the price for manufactured gas in the city of Binghamton is lower than in any other city of the same size or smaller in the state of New York. The only two cities having a lower rate than Binghamton are Rochester and Syracuse, where conditions are different and the communities served are much larger.

House heating by gas was also one of the subjects presented. The stockholders were informed that one installation had been operated throughout the last winter with very satisfactory results, and that other installations were to be made during the summer. The success of house heating by gas has been very clearly demonstrated in many cities throughout New York State and other parts of the country and it is the desire of the Binghamton Gas Works to provide this valuable service to its many customers.

A luncheon was served immediately following the stockholders' meeting.

At the close of the stockholders' meeting the directors elected held their annual meeting to reelect officers for the ensuing year as follows: Alanson P. Lathrop, president; Charles E. Bennett, vice-president and general manager; Robert W. Manier, secretary and treasurer; James Lawrence, assistant secretary and treasurer, and Thomas M. Leahy, auditor.

Insulation Big Aid in Heating Houses

F. G. Phegley, Utica G. & E. Out lines Need

Utica, N. Y.—Four basic conditions must be created in the properly heated home, according to F. G. Phegley, heating and ventilating engineer of the Utica Gas & Electric Company. These are: Comfort, health, ease of manipulation and economy in operation. Mr. Phegley outlined in a comprehensive manner many of the important phases of present day heating before a meeting of the Central New York Association of Architects at the University Club.

The type of system, whether steam, vapor, water or warm air, and the kind of fuel, which may be coal, coke, oil or gas, will not influence the considerations necessary to create these conditions, Mr. Phegley said. The same problems are encountered as far as the heating system is concerned. Comfort and health must be considered together, as they go hand in hand in establishing the physical well being of the individual, the speaker maintained.

Heat losses from buildings occur in four distinct ways, Mr. Phegley pointed out, as follows:

"Air changes in rooms to be heated, heat transmission through building materials, heat dissipated by radiation from outside walls of building, heat carried away by convection or air currents around the building."

Discussing local weather conditions as related to heating problems, Mr. Phegley said:

"In locations around Utica, we find prevailing winds are from the north and west, with a slight wind at times from the east. In estimating heat losses on such sides we must arbitrarily add some facts to offset additional loss. Satisfactory results will be obtained when southern exposure is considered as normal. To heat losses on east wall add 5 per cent., on west wall 10 per cent. and on north wall 20 per cent.

Necessary To Be Exacting

"It is quite necessary to be exacting in estimating heat losses, as all that is to follow in designing a heating system is of no value if serious error is made in calculating losses.

"A word may be said on the subject of insulation. The manufacturers of cork and other insulation materials claim great savings in fuel can be made with use of their product. In fact they point with pride to numerous installations. After it is all said and done, however, the heat loss reduction is not caused so much by the insulation retarding heat loss by conduction, as it is the making of the building tighter and consequently eliminating air leakage or air change. Air change is in reality the largest loss and anything that can be done to reduce such loss is advisable."

The meeting and dinner also served as a testimonial to F. H. Gouge, dean of Utica architects, who has been sick for some time, and marked the final session of the association until fall.

Industrial Philadelphia—The U. G. I. Contracting Company

The Girard Trust Company, of Philadelphia, has a capital and surplus of $12,000,000 *and individual trust funds of* $429,000,000.

When the Girard Trust Company speaks, people usually listen.

Once a month the company publishes a paper entitled "The Girard Letter," and in this paper it frequently describes the activities of the worth-while concerns located in Philadelphia. To be described in "The Girard Letter" is, to a concern, what the "sterling" mark is to silver. It is, therefore, interesting to note the following:

IN Philadelphia and many other cities of the United States "U. G. I." stands for gas. The public thinks of these three famous initial letters as the source of a never-failing supply of light, power, and fuel, created by the United Gas Improvement Company of Philadelphia.

But the U. might well represent University, since this fact stands unchallenged, namely: that the United Gas Improvement Company is not only a gas producer, a gas distributor and a holder of securities of many other gas and electric companies, but for years it has been the world's foremost instructor in everything pertaining to the making and distribution of both water gas and coal gas.

"U. G. I." has not merely led the field. In great measure it has created the field.

But widely known as U. G. I. may be in its major domain of production of gas and electric power and light, there is one important function of the company which is scarcely recognized even here in Philadelphia, the home city of this far-reaching corporation.

U. G. I. Contracting Co. Well Equipped

The U. G. I. Contracting Company is a subsidiary which is so well equipped that no construction job is too big for it to undertake and carry out successfully. And it is the purpose of this article to deal mainly with the Contracting Company, rather than its parent, U. G. I.

It is a fact not widely known that the U. G. I. itself was originally not a holding, but a construction company.

Organized in 1882, the founders of it possessed an unerring business vision. They saw in an invention of Professor Thaddeus Lowe for making water gas a revolutionary thing and they bought it that very year.

Up until that time illuminating gas meant coal gas. And coal gas meant then not only a costly gas but one of less illuminating power.

Lowe's water-gas process made far cheaper gas and also much better gas for illumination.

U. G. I. Starts Building Water Gas Plants

So in the year of its birth U. G. I. stepped to the front and assumed leadership. But it was one thing to be able to make a cheap and superior gas.

It was another thing to prove to the people of America that this could be done. So U. G. I. under the bold and able direction of such men as William G. Warden, W. W. Gibbs, and Thomas Dolan started out to construct water-gas plants.

It was the task of Mr. Gibbs to sell them, and his persuasive tongue very quickly had sold more water-gas plants than the infant U. G. I. Company could deliver in the time specified.

Thus, at the very start, U. G. I. was doing the educational or university work.

For many years past a great percentage of all gas manufactured in the United States has been water gas. And also for many years U. G. I. has been mainly a corporation which owns the securities of other gas and electric companies.

U. G. I. Contracting Co. Organized in 1919

But in 1919 the U. G. I. Contracting Company was organized. Of course U. G. I. always built its own plants wherever located. But the Contracting Company, of which Paul Thompson, who is also a vice-president of the U. G. I., is president, builds not only gas plants but engages in many other forms of general construction work.

It is this particular branch of U. G. I.'s general business which has escaped popular attention, and yet it has grown to substantial proportions.

The U. G. I. Contracting Company is equipped by wide experience and a large technical personnel to design and construct steam power stations and hydraulic plants, high and low voltage transmission lines, gas plants and distribution systems. More than that, this company is also thoroughly equipped to engage in all general construction work, both private and public.

Has Wide Range of Activity

"Would you undertake to construct an electric subway in a city?" was a question put to President Thompson.

"We would," he replied, "and we possess every facility required to do the work as quickly and economically as anybody."

The parent company, U. G. I., has developed practically every important improvement in the process of water-gas manufacture during the past forty years.

And the U. G. I. Contracting Company is proving

to be in its especial field a similar leader. The Contracting Company, as has been the policy of the parent U. G. I. Company, does not stop with doing an appointed piece of work. It is an educator and teacher, thus again emphasizing the point that U. might stand for University.

To illustrate what is meant by this general task of improving all construction undertakings, a number of instances may be cited.

The U. G. I. Contracting Company prepared and issued a valuable booklet, "Suggestions for the Safety and Welfare of Persons and Property During Construction Work."

Which shows that this wide-awake Philadelphia company is prepared not only to do first-class work itself, but strives to teach all others how to do it and at the same time accomplish the task with a minimum of danger and annoyance. That is true leadership in industry.

Then this company has also a booklet setting out in detail how the work of inspecting should be done. That teaches the policy of doing the thing 100 per cent right while it is being done.

Moisture Determination in Fuel

To determine the amount of moisture in fuel is important and the U. G. I. Contracting Company has prepared a scientific treatise on that topic which is available to all contractors and builders and gas producers.

There is a book of instructions for starting and operating U. G. I. waste-heat boilers and for burning out and cleaning the illuminating-gas boiler.

Station meters are an important item in the gas business and the U. G. I. Contracting Company has a book of instructions covering that field.

There is another university touch in a most comprehensive treatise on the subject of U. G. I. carburetted water-gas apparatus. Every possible phase of the subject is covered in a simple but scientific way.

There is another treatise equally valuable which deals with the "Economy of Generation and Utilization of Steam."

All of which indicate the thoroughness and high ideals of this Contracting Company located in Philadelphia.

Quite naturally, therefore, from all parts of the United States come demands for the U. G. I. Contracting Company to engage in important new work. Many of these are highly interesting even to the layman or outsider not financially concerned in any way.

Work on Dams

Take, for example, the Soft Maple Dams. That was not only a great work but one of peculiar interest for several reasons.

This operation is a unit in the great super-power development of northern New York State. The development consists in harnessing the water power of a vast region, from which point will radiate electric transmission lines to carry power in all directions.

To make water imprison a mighty volume of water was the task performed by President Thompson's U. G. I. Contracting Company. How?

By a process of hydraulic power or slucing the entire work was accomplished. Such a process, while used occasionally in the West, had never before been employed in the East.

With powerful streams of water a big hill was washed out and carried in sluices and deposited across the river to form dams. More than 1,000,000 cubic yards of earth were thus removed from the hill and converted into dams.

Water was used entirely to do all the work, from loosening the material in the hill to conveying it into its newer but now permanent resting place as a super-power dam.

The Soft Maple Dams are really a monument to the enterprise and achievement of the U. G. I. Contracting Company. No doubt what was accomplished there may in future prove to be highly profitable in other places, now that in all parts of America the harnessing of streams for electric-power purposes is in progress.

But Soft Maple is not the only scene of big tasks successfully performed by the U. G. I. Contracting Company.

Other Dam Building

The company is also participating in the development of the Nation's resources through the medium of three contracts with the United States Government for the building of two large dams and a large concrete lock on the Ohio River. This work is a portion of the Federal Program, enthusiastically supported by Mr. Hoover, for the development of the Nation's inland waterways. The Ohio River project was commenced back in 1907 to build sufficient dams and locks to provide a nine-foot all-year-'round channel on the Ohio River from Pittsburgh to the Mississippi. Work on these structures can be done only in the "dry" or summer season. Each dam is a "three-season job," while the lock will require two seasons.

The great new power station at Devon in Connecticut was another high achievement. That work marks a big forward step in development of New England super-power.

It is what they call the base-load, high-tension plant of the Connecticut Light and Power Company and was designed for ultimate 200,000 kva. rating.

This plant will supply power for a large section of southwestern Connecticut. It was built, if the demand arises, to form a unit in a still greater super-power project.

The whole trend now is toward greater and greater

electric generating stations, since science has found a way to transmit current with but little loss for distances up to several hundred miles.

Activities Near Philadelphia

Much nearer home than either of these other big works created by the U. G. I. Contracting Company is the Barbadoes Island plant in the Schuykill River.

Between Norristown and Bridgeport lies Barbadoes Island and upon it a large power plant has been built by the U. G. I. Contracting Company. Its initial capacity is 45,000 kw. and it is owned by the Counties Gas and Electric Company.

There are in the plant three 1,680 horse-power boilers and two 25,000 kva. turbo generators. There are features about this new plant which are said to illustrate the very last word in power-station construction, but it is not the purpose of this article to go into scientific details.

As a third specimen of work executed by this enterprising Philadelphia Contracting Company may be cited the Big Sioux Power Plant at Sioux City, Iowa.

This station was created to supply the entire electric power, lighting, and railway load required in Sioux City and the territory for 100 miles east of that town. The new plant is owned by the Sioux City Gas and Electric Company.

In that case the question of clean water was an important one and the Sioux River, rather than the Missouri, was selected as a site because of its better water and the more stable condition of the river bed.

There is no more efficient nor more nearly perfect electric power plant in the West than the Big Sioux. It is a real triumph in modern construction and must be convincing to any municipality or corporation seeking a new source of power for itself.

Furthermore, by introducing the system of powdering the coal before burning under the boilers, the company is able to burn the low-grade local coals at high efficiency with considerable economic saving.

Other Contracts

The Contracting Company has designed and is now building for the San Antonio Public Service Corporation, a new steam power station at Comal, Texas. This plant is designed so that natural gas, oil, or powdered coal can be used to burn under the boilers, thus permitting the operators to take advantage of the best markets on the local fuels available. Before designing this plant, tests were carried out on a low-grade coal which is mined near the site and is practically a lignite. It is anticipated that this will form one of the chief fuels.

The Westinghouse Blade Shop at Lester, which many Philadelphians have seen, is not only a big work, but it showed how in this instance the U. G. I. Contracting Company saved over $100,000 for its client.

That was accomplished by a fair working agreement, the plans having been jointly prepared by Westinghouse and the U. G. I. Company.

Not only did the Contracting Company save over $100,000 for its client on that job, but it completed the work several weeks ahead of the specified time, which is a very unusual thing in these days of delays in all forms of building construction.

And the General Electric Company sent to Philadelphia and employed the U. G. I. Contracting Company to erect a great new industrial building at Schenectady, New York.

These examples of work done are quite sufficient here to illustrate the variety, the importance, and the clientele served by the U. G. I. Contracting Company.

The high speed at which that enormous plant at Lester, on the Delaware just south of Philadelphia, was erected merited a blue ribbon for the contractor and also for the client, which is something not always achieved in building operations.

It should be a source of satisfaction to Philadelphia to study the progress of U. G. I., the parent company, along this newer field of its development.

The distribution of gas alone is a far greater and costlier matter than the public appreciates.

Recent statistics show that in 4,600 cities and towns there are 69,500 miles of underground distribution gas mains.

Upon top of that colosal mileage of metal pipes must be added many thousand miles more in the shape of connecting service.

U. G. I., as the world's leader in water gas, recently had paid to it a merited but unusual tribute of confidence by its home city. When the City of Philadelphia entered into terms for extending the lease of the municipal gas plant to U. G. I. Company for another twenty years, City Councils, without one dissenting vote, agreed to a continuance of these relations. That was a fitting climax for the long and able official career of Mr. Samuel T. Bodine, president of the parent company.

But whether this far-reaching corporation is viewed in the light of a gas producer, a gas distributor, a leader in all matters pertaining to the gas and power business, or whether as now it is viewed from the standpoint of just one important new function, that of a construction company, its record shines brightly.

American business has during the past generation seen very few great concerns managed with more skill, fairness, or success than United Gas Improvement of Philadelphia.

(*Adv.*)